

Work Order ID 54886

January 5, 2010 8:08:00 AM



Page 1

Item ID: D119-646-243

Left Hand

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: *PL*Date: *10-1-05*

Tooling:

Date:

Run Start



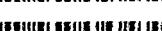
QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3905	B
HIN-D119-646	B

100

0.00



DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D119-646-243
CHG 001
N/A HJ

110

0.00



Skidtubes

Memo

0.00

1- Inspect Mat'l D2500-1-190 for damage

Skidtubes

2- Ensure squareness of ends

10-1-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

Page 2

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

120

Chemical Conversion Coat per QSI005 4.1

Set Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

DP

10-1-6

0.00

HandFinish

Memo

Hand Finishing

130

QC3- Inspect Part Finish

0.00

10/1/6

QC

Memo

0.00

Quality Control

150

Memo

0.00

Skidtubes

1- Install drill jig DT9480 drill all x-bolt spacer holes using 3/16 drill

DP 10-1-6

Skidtubes

2- Scribe batch # inside aft end of tube

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

January 5, 2010 8:08:00 AM



Page 3

Item ID: D119-646-243

Accept



Setup

Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run

Start



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID



QC
Quality Control

Operation
Description

QC5- Inspect part completeness to step on W/O

Memo

Set Up/
Run Hours

0.00

Draw
Number

0.00

Draw
Rev.

0.00

Plan
Code

0.00

Accept
Qty

0.00

Reject
Qty

0.00

Reject
Number

0.00

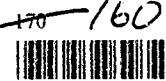
Insp.
Stamp

0.00

25.25"
2010/01/07

QC

✓



CNC Bend 1

CNC Delta 100 Bender

Memo

0.00

0.00

1- Bend AFT end of tube using CNC Bender 1 and bend prog. D3905 AFT as per dwg D3905. Must use bending Aid DT9538, located 23.25" from Aft end.

2- Ensure bending Aid DT9538 is positioned correctly, that the bender set up is on full wide and that the indexing ridge is covered with graphite grease.

DP

10-1-7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886



Page 4

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

180

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

0.00

Memo

0.00

AUM 10-01-09

Skidtubes

1- Verify dimension of bend as per dwg D3905

2- Buff out marks left from bending.

3- Drill Aft Float bag holes using DT9493 as per dwg D3905 detail G and section F-F, open to finished size

4- Drill Aft wearplate and wearpad holes using DT _____ and DT _____ as per dwg D3905 detail G open to finished size

5- Open x-bolt spacer holes to finished size as per dwg (sections D-D and E-E)
DO NOT OPEN FWD SADDLE HOLES

6- Deburr, blow out chips from inside of tube

7-Bond web in place as per Dwg D3905 & QSI 015.

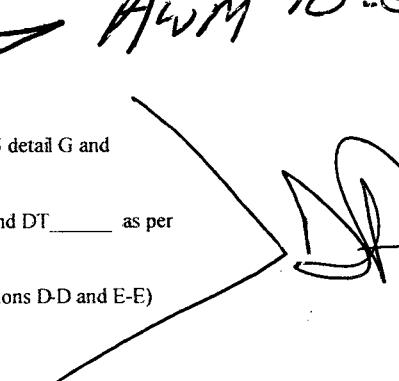
A/R: Sikaflex-291 M 11/23/09

Sikaflex expire date: 10/7/10

Start: 10/1/10 Time: 10:30 am

Finish: 10/1/10 Time: 11:30 am

***** (Adhere for 12 hours) *****



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886



Page 5

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

(OK)

26/10/10

200



CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1- Bend Fwd end of tube using bender 1 and bend prog. D3905 Fwd. Use
bending aid DT9544 ensure proper positioning2- Cut Fwd end of tube as per dwg.
VERIFY MEASURMENT BEFORE CUTTING

10-1-18

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.01.20	Z00	LENGTH IS 179.35" TOTAL. RL Process	CP 10.01.20 pw QSI 042	Acceptable. REMAINING DIMS OK	S 10.01.20 pw QSI 042	P 10.01.20 pw QSI 042	S 10.01.20 pw QSI 042	S 10.01.20 pw QSI 042

NOTE: Date & initial all entries

Work Order ID 54886



Page 6

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup

Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

210

Operation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Memo

0.00

1- Buff out marks left from bending

2- Drill Fwd cap holes using DT8215. Open Fwd and Aft cap holes to 0.208"

3- Open Fwd saddle holes to finished size as per dwg

4- Drill Fwd x-bolt hole and open to finished size. (Holes must be laid out manually)

5- Drill towring hole and open to finished size. (Holes must be laid out manually)

6- Open Aft float holes 0.391" as per dwg D3905 detail G and section F-F

7- Deburr, blow out chips from inside of tube.

220



QC5- Inspect part completeness to step on W/O

0.00

0.00

→ 8/18/20

QC

Memo

Quality Control

10-1-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

January 5, 2010 8:08:00 AM



Page 7

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

224



Skidtubes

Memo

0.00

BE 10/01/21

BE 10/01/21

BE 10/01/21

4- Weld x-bolt spacer as per dwg

A/R Alum rod Batch: 1112860

BE 10/01/21

5- Grind welds flush as per dwg

6- Counter bore x-bolt holes as per dwg

7- Deburr

AVM 10-1-21

225



QC5- Inspect part completeness to step on W/O

0.00

→ S100121

QC

Memo

0.00

Quality Control

46

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

January 5, 2010 8:08:00 AM

Page 8

Item ID: D119-646-243

Accept



Setup

Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
Description

226

QC10- Inspect visual per QSI004- ground welds



QC

Memo

Quality Control

Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
0.00	→ S100121						
0.00							

227

Pressure Wash per QSI005 4.3



HandFinish

Memo

Hand Finishing

0.00	BL 10-01-26	①	φ
0.00			

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

Powder Coating

M113170

0.00

M 10-01-26 ① φ

START: 2:15pm

Temp: 320°F

Fin: 2:45pm

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

Page 9

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

245

QC3- Inspect Part Finish

0.00

BK 10-02-3 ①.

QC

Memo

0.00

Quality Control

250



HandFinish

Memo

0.00

BB 10-02-3 ①.

Hand Finishing

1-Install inserts as per Dwg D3905.

PH →

260



QC5- Inspect part completeness to step on W/O

0.00

S. W. L. G.

QC

Memo

0.00

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D119-646-243 PAR #: Fault Category: Skid tubes NCR: Yes No DQA: Date: 10/02/17
 Resolution: re work Disposition: re work QA: N/C Closed: Date: 10/02/18

NCR: 54886		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/2/11	# 208	During installation of inserts it was found that the 1 hole for the insert is too close to the Rose in the aft. R.C: process	(P) 10/02/01 QSI 042	→ Buff out some of the rose to fit → Re touch up Alumi Part 052005 → Apply Intra Paint to cover up	D 10.2-2 BR 10.02.2 S 10/02/01	S 10/02/01	(P) 10.02.01 P/W QSI 042	S 10/02/01
			(P) 10/02/01	remove old P/I & per 052005	6 10.2-2 S 10/02/03	S 10/02/03	(P) 10.02.01	S 10/02/01

NOTE: Date & initial all entries

Work Order ID: 54886



Page 10

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

270



HandFinish

Memo

0.00

1-Install wearpads, gaskets and wearplates as per Dwg D3905. Put sikaflex in
insert before installing bolts and washersA/R Sikaflex-240/-291

Sikaflex expire date:

M112345
10/08.

Hand Finishing

2- install plugs assembly as per dwg.

3 -Inspect for foreign objects as per QSI 024

4 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-240/-291

Sikaflex expire date:

M112345
10/08.

280



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

MA 8

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

January 5, 2010 8:08:00 AM



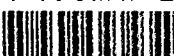
Page 11

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

285



Operation
Description

Wing Walk as per dwg QSI005 4.4 Batch

Set Up/
Run Hours

0.00

Draw
Number

Draw
Rev.

Plan
Code

0.00

Accept
Qty

0.00

Reject
Qty

0.00

Reject
Number

0.00

Insp.
Stamp

HandFinish

Memo

0.00

QC3 0.00
S10205
0.00
QLS 810205

BK 10-02-4. ①

286



QC3- Inspect Part Finish

QC3

Memo

0.00

Quality Control

(H)
(C)

290



Identify as per dwg & Stock Location: _____

0.00

0.00

Packaging

Memo

PP

54883

10-2-11 SJ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 54886

Page 12

January 5, 2010 8:08:00 AM

Item ID: D119-646-243

Accept



Setup Start



Revision ID:

Item Name: Replacement Float Skidtube w/ Training Wearplates

Stop



Start Date: 05/01/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/02/10 HJ

MF 10-2-11

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 1

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty On Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	--------------	-------------	---------------------	------------------	-----------------	--------------------	-------------------	--------------------------	---------------	----------------	--------

D2500-1-190



Manufactured

No

110

Each

96.0000

1.0000



Ext'n - I' Beam Tube 4"

<u>Warehouse</u>	<u>Location</u>
Main Warehouse	LG
Main Warehouse	52319
Main Warehouse	ST

<u>Loc Qty</u>	<u>Loc Code</u>
93	
3	
3	

10-1-6

D3885-3



Manufactured

No

170

Each

14.0000

1.0000



Standard Web

<u>Warehouse</u>	<u>Location</u>
Main Warehouse	LG
Main Warehouse	47740
Main Warehouse	ST
	51844
	52425

<u>Loc Qty</u>	<u>Loc Code</u>
----------------	-----------------

1	
1	
13	
1	
12	

10/1/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 2

Work Order ID: 54886**Parent Item:** D119-646-243**Parent Item Name:** Replacement Float Skidtube w/ Training Wearplates**Start Date:** 05/01/2010**Required Date:** 18/01/2010**Comments:** IPP RevB: revise seq process 09.11.10 DD verified by:EC**Start Qty:** 1.00**Required Qty:** 1.00

Component Item ID/ Item Name	Replacement Item ID	Orig/ Arch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3903-1 		Manufactured	No			190	Each	64.0000	12.0000			

Spacer

Warehouse**Location**

Main Warehouse

LG

54

51849

54

Main Warehouse

ST

10

47476

10

D3681-1

Manufactured No

190

Each

70.0000

Spacer

Warehouse**Location**

Main Warehouse

LG

68

51920

20

52898

48

Main Warehouse

ST

2

47123

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

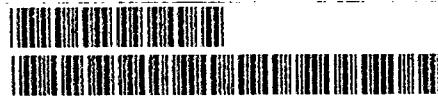
NOTE: Date & initial all entries

Picklist Print

Page 3

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3683-3		Purchased	No			250	Each	623.0000	12.0000			

Insert

WarehouseLocation

Main Warehouse

ST

47805 ✓

Loc QtyLoc Code

623

623

12. BK 10-02-3

ALS4-1032-130



Purchased

No

250

Each

2,717.000 10.0000



Insert

WarehouseLocation

Main Warehouse

ST

110511 ✓

Loc QtyLoc Code

2717

2717

10 BK 10-02-3.

D2855-3



Manufactured

No

270

Each

15.0000 2.0000



Cap

WarehouseLocation

Main Warehouse

fp5

52281 ✓

Loc QtyLoc Code

15

15

BK
2. 10-02-3.

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 4

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-I		Manufactured	No			270	Each	1,744.000	4.0000			

Phenolic Washer

Warehouse	Loc Qty	Loc Code									
			Location								
Main Warehouse											
ST	1244										
39275	19										
42329	5										
47628 ✓	220										
52505	1000										
Main Warehouse											
ST117	500										
51674	500										
D3846-I	Manufactured	No	270	Each	51.0000	1.0000					

GASKET

Warehouse	Loc Qty	Loc Code		
			Location	
Main Warehouse				
ST	19			
47806 ✓	11			
51827 ✓	8			
Main Warehouse				
ST236B	32			
53735	32			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

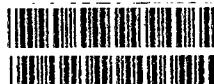
NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 5

Work Order ID: 54886



Parent Item: D119-646-243

Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3846-11		Manufactured	No			270	Each	29.0000	1.0000			

GASKET

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

FP	18	
51833 ✓	18	

Main Warehouse

ST	11	
47807	11	

D3847-1

Manufactured No

270 Each 37.0000 1.0000

WEARPAD

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
------------------	----------------	-----------------

Location

Main Warehouse

ST	37	
47808	4	
51823 ✓	33	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 6

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacer Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3847-11		Manufactured	No			270	Each	19.0000	1.0000			

WEARPAD

WarehouseLocation

Main Warehouse

FP

17

51824

17

1 Bl 10-02-3.

Main Warehouse

ST

2

47809

2

D3849-047

Manufactured

No

270 Each 2.0000 1.0000



WEARPLATE

WarehouseLocation

Main Warehouse

ST

2

51837

2

1 Bl 10-02-3.

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 7

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3849-045		Manufactured	No			270	Each	3.0000	1.0000			

AFT WEARPLATE ASSY, FLOATGEAR

Warehouse

Location

Main Warehouse

ST

3

47811

1

51836

2

16/10-02-3.

D3904-1

Manufactured No

270

Each

301.0000

16.0000



Washer

Warehouse

Location

Main Warehouse

ST

1

48374

1

Main Warehouse

ST136

300

51875

300

16/10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 8

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	U/Pg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-3		Manufactured	No			270	Each	252.0000	12.0000			

Phenolic Washer

Warehouse Loc Qty Loc CodeLocation

Main Warehouse

ST	8
34471	8

Main Warehouse

ST117	244
51596 ✓	244

12. bK 10-02-3.

AN3C5A



Purchased

No

270 Each 669.0000 14.0000



Bolt

Warehouse Loc Qty Loc CodeLocation

Main Warehouse

ST 11344	669
111424	8
111707	69
112314	1
113121	291
113149	300

14 bK 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 5, 2010 8:08:05 AM

Page 9

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3C46A		Purchased	No			270	Each	104.0000	4.0000			
---------	--	-----------	----	--	--	-----	------	----------	--------	--	--	--

BOLT

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

Main Warehouse		
ST 111918	104	
106169	5	
106176	9	
113164	40	
113302 ✓	50	

1 BK 10-02-3.

AN960C10L



Purchased

No

270	Each	416.0000	10.0000
-----	------	----------	---------



<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-------------------------------------	----------------	-----------------

OFFSHORE		
FG 113288	100	
103585	100	

3 BK 10-02-3.

washer

NFS1149C0332R

Main Warehouse		
ST 112116	316	
112612	156	
	160	

10. BK 10-02-3.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 10

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C416		Purchased	No			270	Each	542.0000	12.0000			

washer

Warehouse

Location

Main Warehouse

ST

100993 ✓

Loc Qty

Loc Code

542

542

12 BL 10-02-3.

MS21043-3



Purchased

No

270

Each

4,542.000 8.0000



Nut

Warehouse

Location

OFFSHORE

FG

80

103691

80

Main Warehouse

ST

4462

111819

70

112243

29

112314 ✓

4363

8 BL 10-02-3 .

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 11

January 5, 2010 8:08:05 AM

Work Order ID: 54886



Parent Item: D119-646-243



Parent Item Name: Replacement Float Skidtube w/ Training Wearplates

Start Date: 05/01/2010

Required Date: 18/01/2010

Comments: IPP RevB: revise seq process 09.11.10 DD verified by:EC

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039C4-08		Purchased		No		270	Each	93.0000	12.0000			

SCREW

WarehouseLocation

Main Warehouse

ST

17831 ✓

Loc QtyLoc Code

93

93

1248 10-02-3.

AN3C50A

Purchased

No

270

Each

70.0000 4.0000



Bolt

WarehouseLocation

Main Warehouse

ST

112046

112454

112761 ✓

Loc QtyLoc Code

70

5

15

50

48 10-02-3

D3411-3

Manufactured

No

270

Each

58.0000 16.0000



WASHER

WarehouseLocation

Main Warehouse

ST

51635 ✓

52597 ✓

Loc QtyLoc Code

58

18

40

16 10-02-3.

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

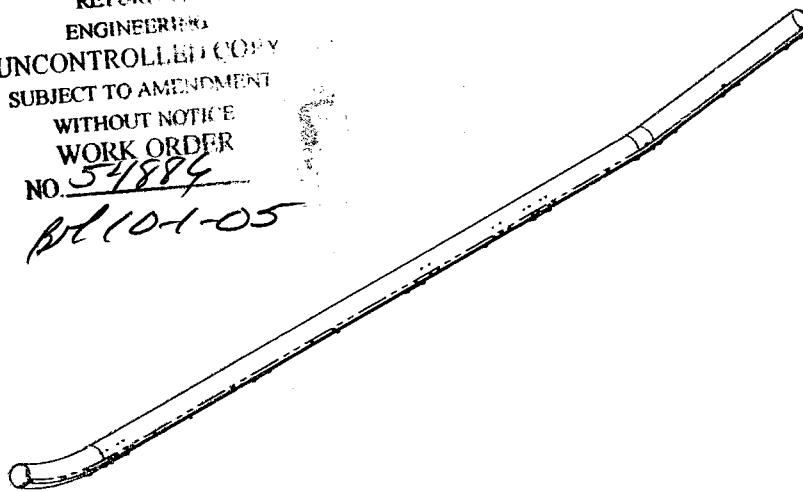
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

SHOWN
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 54884
PL101-05



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

1) MATERIAL: N/A
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-3 FLOAT WEB
 POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3

BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: D3905-041 = 40.7 lbs

D3905-043 = 47.0 lbs

D3905-045 = 47.3 lbs

8) WELD PER DART QSI 004

9) DAMAGE TOLERANCE ON FWD BEND:

THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

10) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP

11) INSERT D3492-045 PLUG ASSY INTO Ø.197 HOLES (BOTH SIDES OF TUBE)

12) USE DART DRILL TEMPLATE DT8932 TO LOCATE AND DRILL Ø.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3905-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-291.

ITEM	QTY 041	QTY 043	QTY 045	P/N	DESCRIPTION
1	X			D3905-041	FLOAT SKIDTUBE ASSY WITH WEARPAD
2		X		D3905-043	FLOAT SKIDTUBE ASSY WITH WEARPLATE
3			X	D3905-045	FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER
14	8	8	8	D3681-1	SPACER
15	8	1	1	D3846-1	GASKET
16	1	1	1	D3846-11	GASKET
17	8	8	1	D3847-1	WEARPAD
18	1	1	1	D3847-11	WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-049	AFT WEARPLATE ASSY
22		1		D3849-047	FWD WEARPLATE ASSY
23		1		D3849-045	AFT WEARPLATE ASSY
24	1	1	1	D3885-3	FLOAT WEB
25	1	1		D3905-11	FLOAT SKIDTUBE
26			1	D3905-13	FLOAT SKIDTUBE
27	12	12	12	D3903-1	SPACER
28			16	D3904-1	WASHER
29	12	12	12	D3672-3	WASHER
30	12	12	12	D3683-3	INSERT
31			16	D3411-3	WASHER
41	42	42	10	ALS4-1032-130	INSERT
42	46	46	14	AN3C5A	BOLT
43		4	4	AN3C46A	BOLT
44		4	4	AN3C50A	BOLT
45	46	46	10	NAS1149C0332R	WASHER (OR ANS60C10L)
46	12	12	12	NAS1149C0463R	WASHER (OR ANS60C41L)
47		8	8	MS21043-3	NUT
48	12	12	12	MS27039C4-08	SCREW

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

B

RELEASED
06/15/08

B	REVISED PART LIST. ALS4-1032-130 WAS AELS-1012-130 (ZN A6-5, A5-6, C5-7, C3-7, A5-7), ADD DT8932 (ZN A8-1); D2855-3 WAS D2852 (ZN C8-2, C7-2, C4-3, C3-3, C5-2, C4-2); AN3C5A WAS AN3C5A (ZN C8-2, C7-2, C4-3, C3-3, C5-2, C4-2); D3847-047 WAS D3849-041 (ZN B3-4), ADD D3411-3 (ZN B3-4, A6-5, A5-6, C5-7, C3-7, A5-7), ADD D3672-1 (ZN B3-4, C2-7, A8-7 & DT-8); REVISED NOTE # (ZN A8-7)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	RF	DRAWING NO.	REV. B
CHECKED	RF	D3905	SHEET 1 OF 8
MFG. APPR.	RF	TITLE	SCALE
APPROVED	RF	A119 FLOAT SKIDTUBE ASSY	NTS
DE APPR.	RF	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS TO BE USED FOR DART AEROSPACE USA, INC. BUSINESS PURPOSES ONLY. IT IS NOT TO BE COPIED OR DISSEMINATED EXCEPT WITH THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	
DATE	09.06.30		

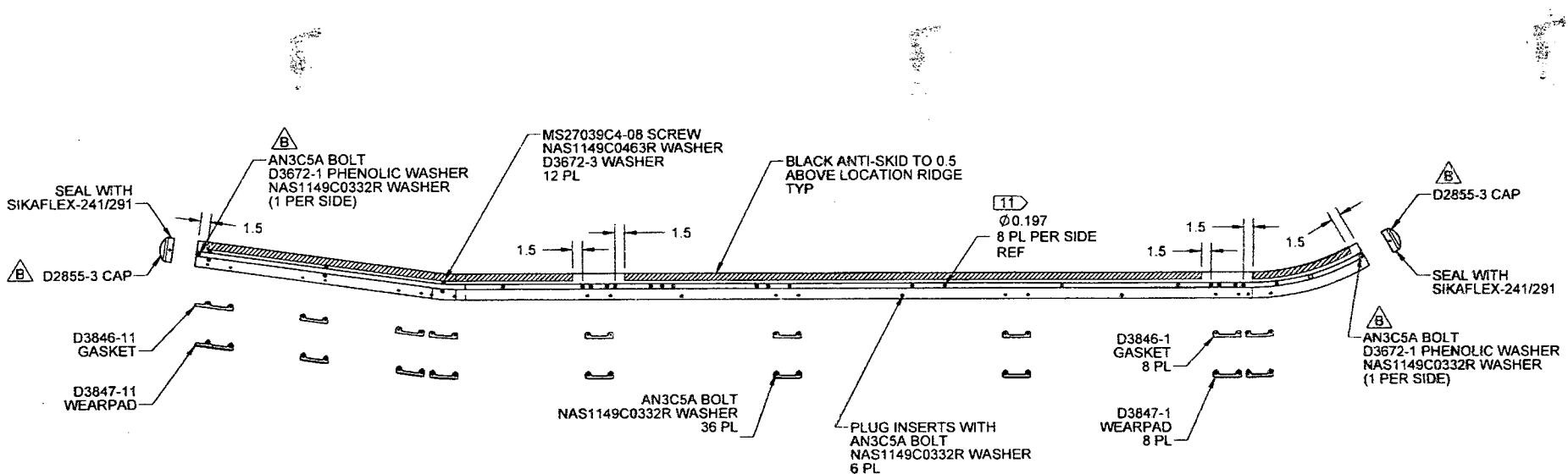
8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD
(MAKE FROM D3905-11 SKIDTUBE)

RELEASED
07/07/2010

1054886

DESIGN	RF	DART AEROSPACE USA, INC. PORT HADLOCK, WA
DRAWN	RF	
CHECKED	RE	DRAWING NO. D3905 REV. B
MFG. APPR.	11	SHEET 2 OF 8
APPROVED	11	TITLE A119 FLOAT SKIDTUBE ASSY NTS
DE APPR.	11	DATE 09.06.30

COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PROVIDED FOR INTERNAL USE ONLY. IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

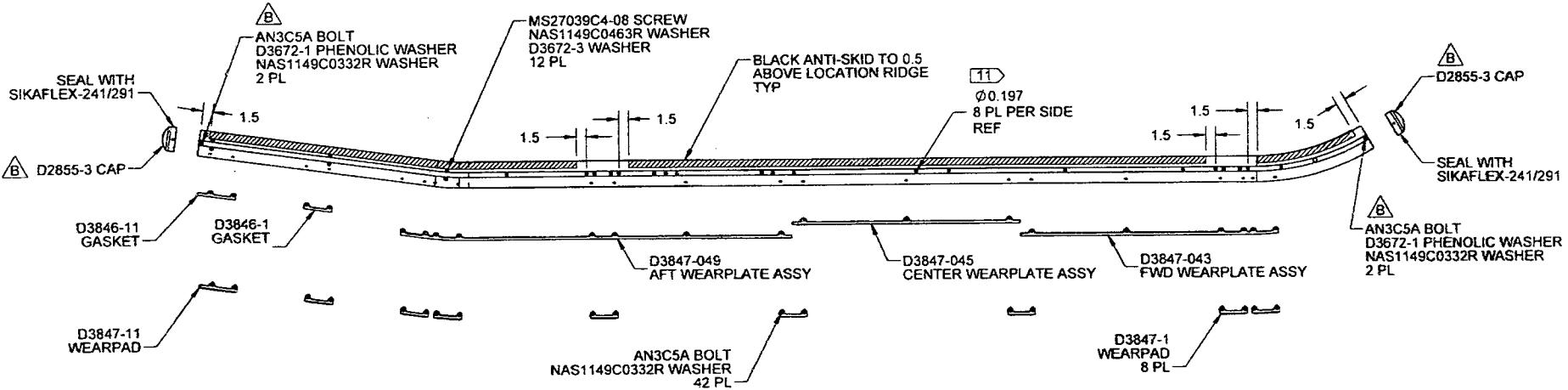
8 7 6 5 4 3 2 1

D

C

B

A



D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE
(MAKE FROM D3905-11 SKIDTUBE)

RELEASED
10/07/15 MHD

W/0 54886

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	RF	DRAWING NO.	REV. B
		D3905	SHEET 3 OF 8
MFG. APPR.	RF	TITLE	SCALE
APPROVED	RF	A119 FLOAT SKIDTUBE ASSY	NTS
DE APPR.	RF		
DATE	09.06.30	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE QUATERLY CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

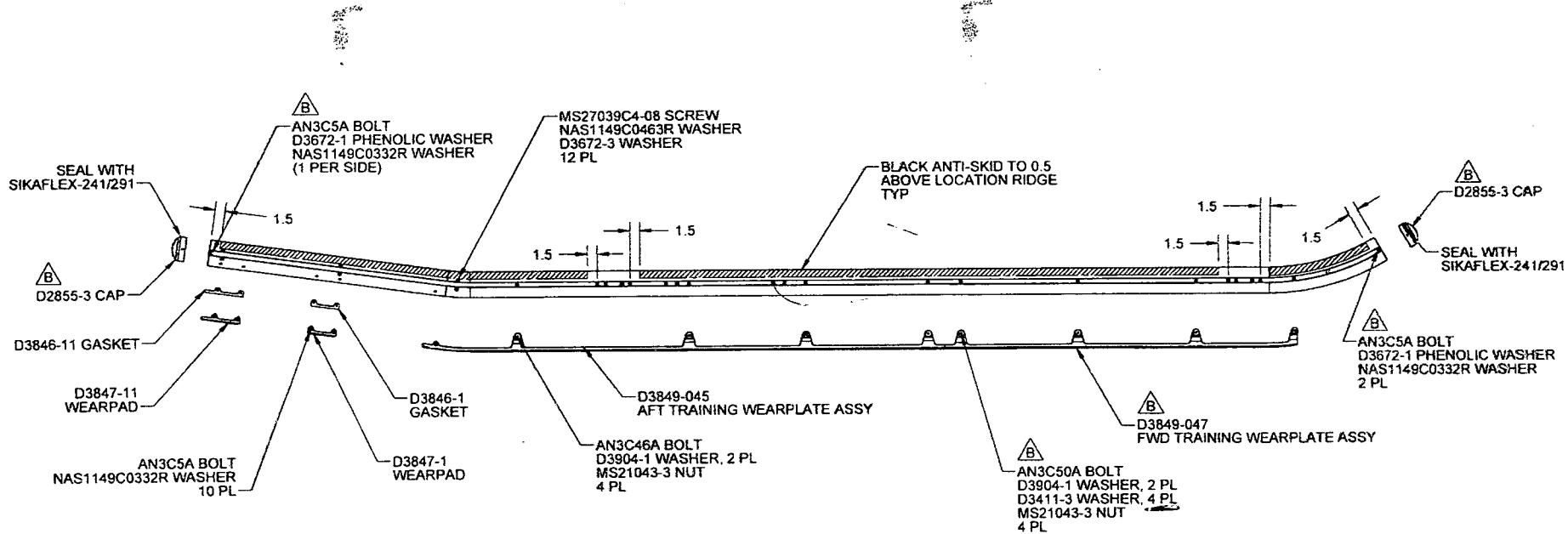
8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3905-13 SKIDTUBE)

RELEASED
10/07/15 MWD

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>PA</i>	DRAWING NO.	
MFG. APPR.	<i>EA</i>	REV. B	
APPROVED	<i>MM</i>	D3905	
DE APPR.	<i>MM</i>	SHEET 4 OF 8	
DATE	09.06.30	TITLE	SCALE
		A119 FLOAT SKIDTUBE ASSY	
		NTS	

COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.
THIS DOCUMENT CONTAINS TRADE SECRETS AND IS SUBJECT TO THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

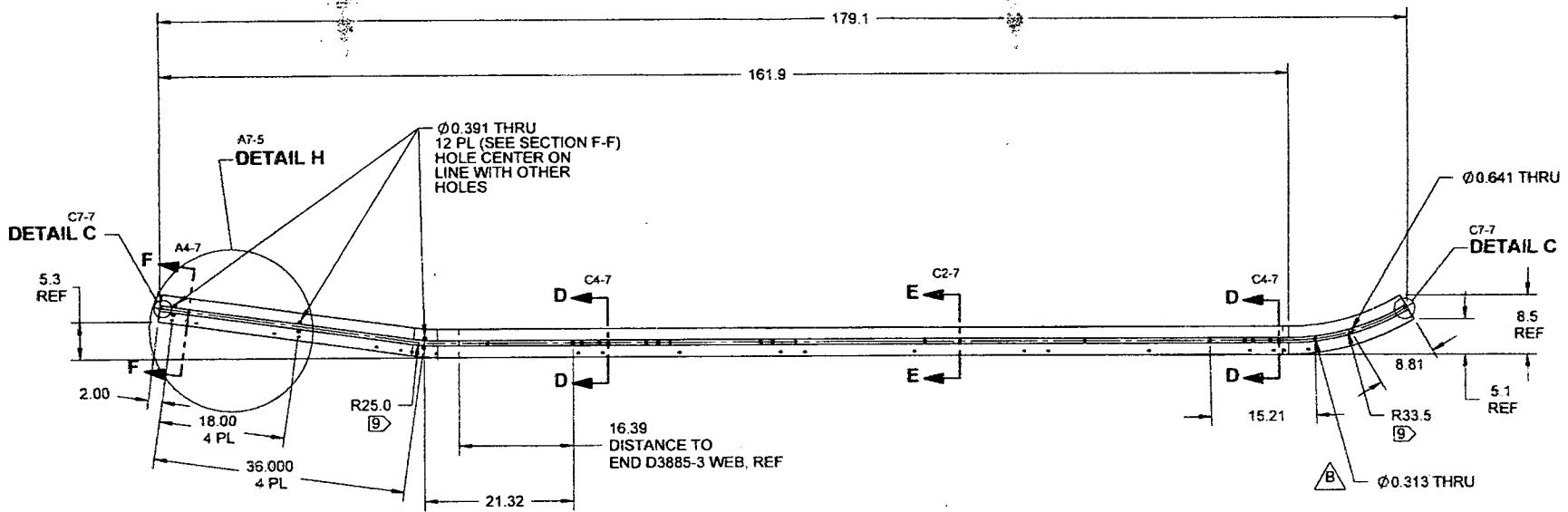
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

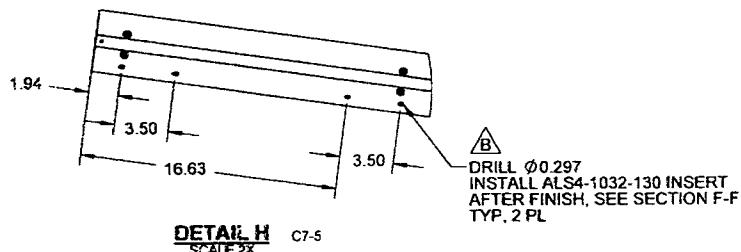
8 7 6 5 4 3 2 1



D3905-11 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)

RELEASED
09/07/15 AM

W/0 5488C



DESIGN	RF	DART AEROSPACE USA, INC.
DRAWN	RF	PORT HADLOCK, WA
CHECKED	RS	DRAWING NO.
MFG. APPR.	ED	REV. B
APPROVED	AM	D3905
DE APPR.	AM	SHEET 5 OF 8
DATE	09.06.30	TITLE
		A119 FLOAT SKIDTUBE ASSY
		NTS

COPYRIGHT © 2009 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS THE PROPERTY OF DART AEROSPACE USA, INC.
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED BY ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

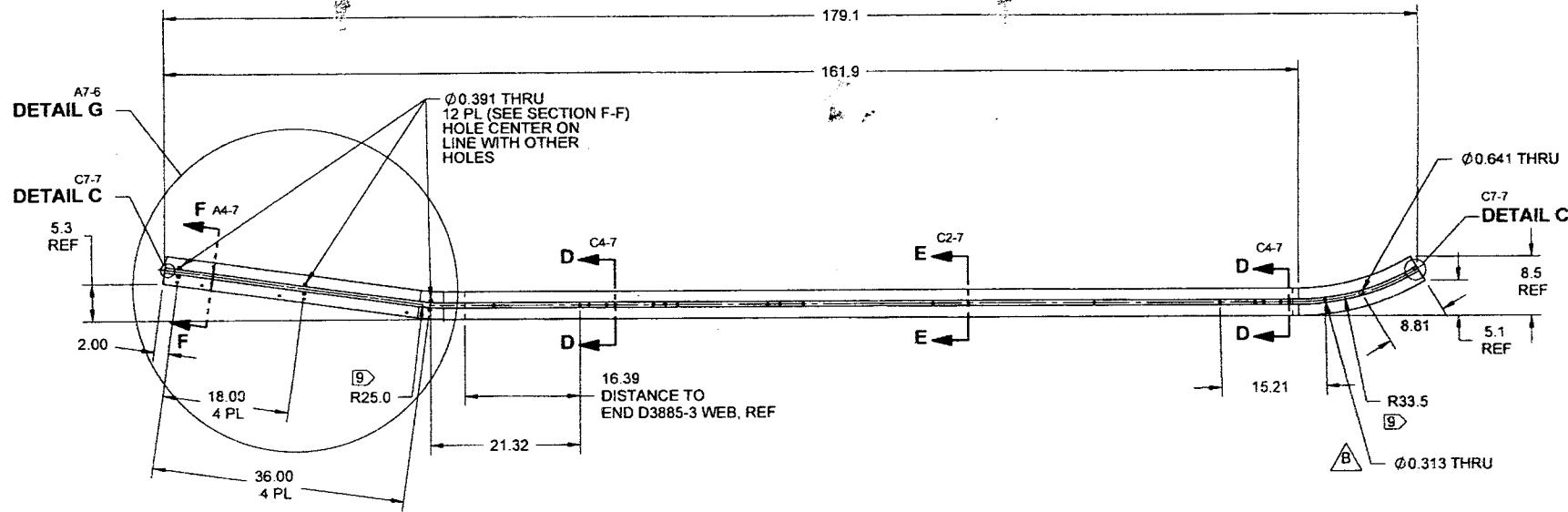
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

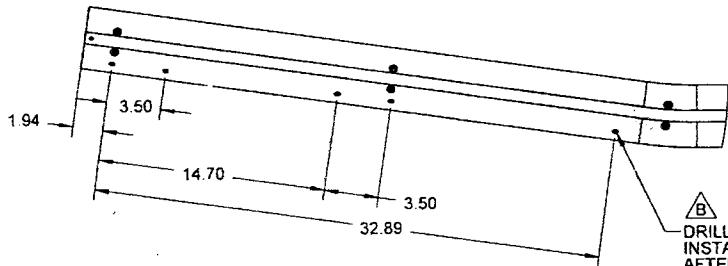
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1 1



D3905-13 FLOAT SKIDTUBE
(MAKE FROM D3905-1 TUBE)



RELEASED
09/07/15 MPA

W/0 54886

DESIGN	RF	DART AEROSPACE USA, INC.
DRAWN	RF	PORT HADLOCK, WA
CHECKED	AB	DRAWING NO. REV. B
MFG. APPR.	AB	D3905 SHEET 6 OF 8
APPROVED	AB	TITLE SCALE
DE APPR.	AB	A119 FLOAT SKIDTUBE ASSY NTS
DATE	09.06.30	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY OTHER PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

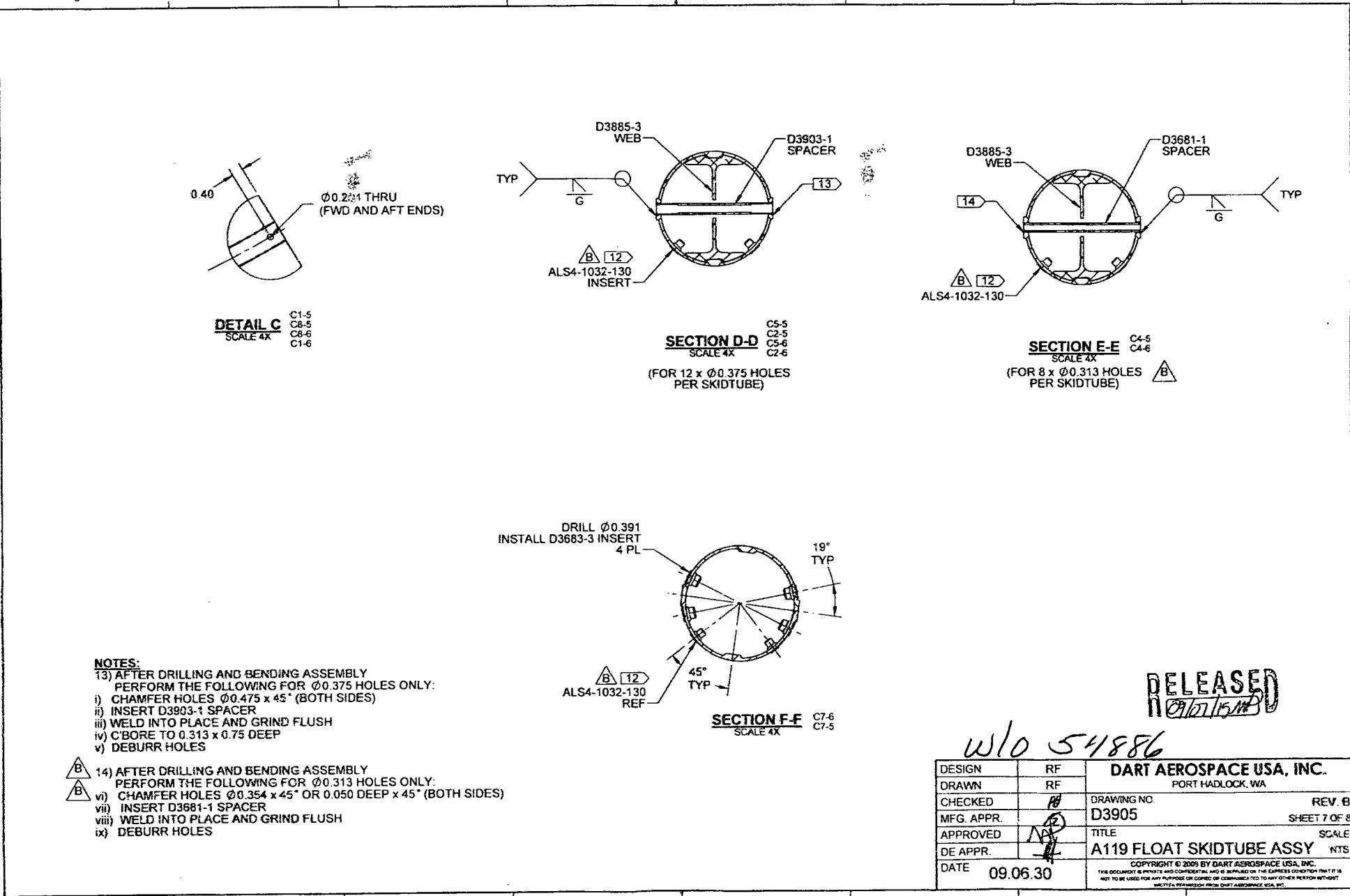
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



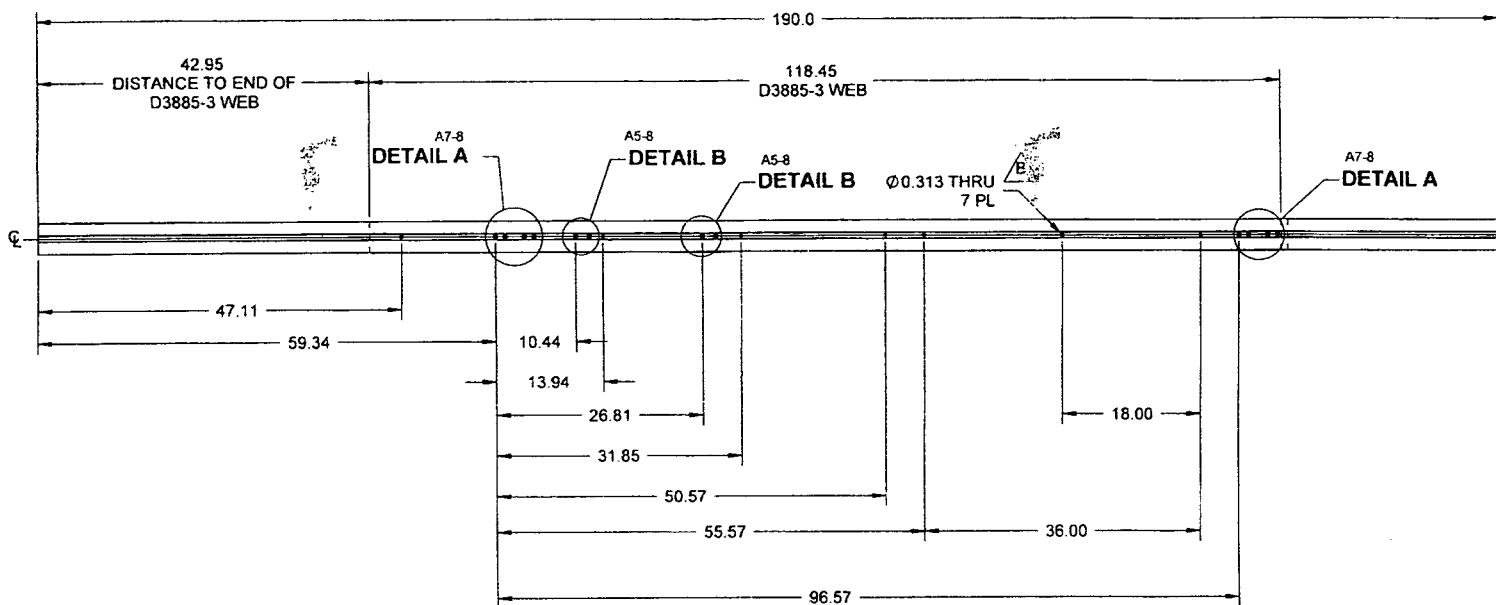
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

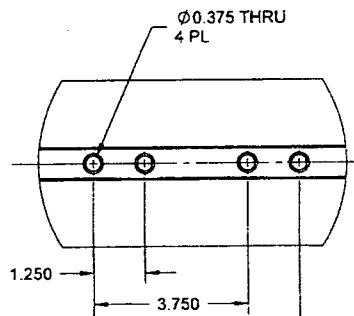
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

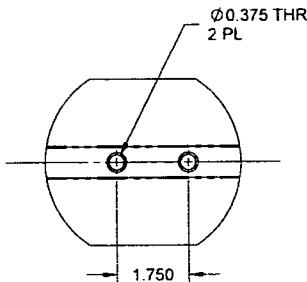
NOTE: Date & initial all entries



D3905-1 TUBE
(MAKE FROM D2500-1-190 EXTRUSION)



DETAIL A
SCALE 4X
D2-8



DETAIL B
SCALE 4X
D4-8

w/0 54886

RELEASED
01/01/15 10:00

DESIGN	RF	DART AEROSPACE USA, INC.
DRAWN	RF	PORT HADLOCK, WA
CHECKED	<i>AB</i>	DRAWING NO. REV. B
MFG. APPR.	<i>AB</i>	D3905 SHEET 8 OF 8
APPROVED	<i>AB</i>	TITLE A119 FLOAT SKIDTUBE ASSY
DE APPR.	<i>AB</i>	SCALE NTS
DATE	09.06.30	COPYRIGHT © 2003 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 217

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 52996
Part number: D119.646.243
Description: 11" skid tube
Welding Process: Tig Mig
Base material: Aluminum
Current: AC DC

TEST REQUIREMENTS AND RESULTS

Visual: pass fail
Penetration: pass fail

UNACCEPTABLE

Cracks: pass fail
Undercut: pass fail
Pin holes: pass fail
Overlap (cold lap) pass fail
Porosity (surface): pass fail
Coloration: pass fail

Qualifier Barclay Elliott Date of Test Coupon 09.11.16

Welder Barclay Elliott Date of Test Coupon 09.11.16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld